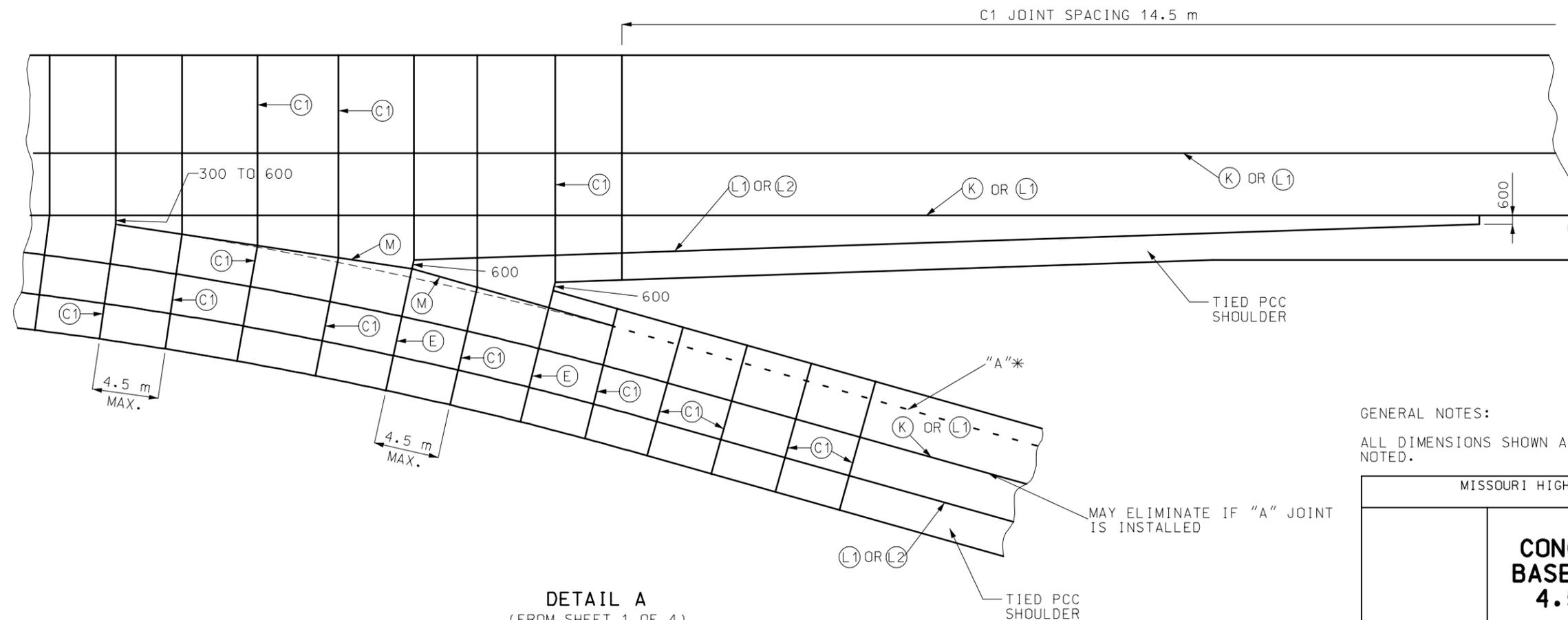


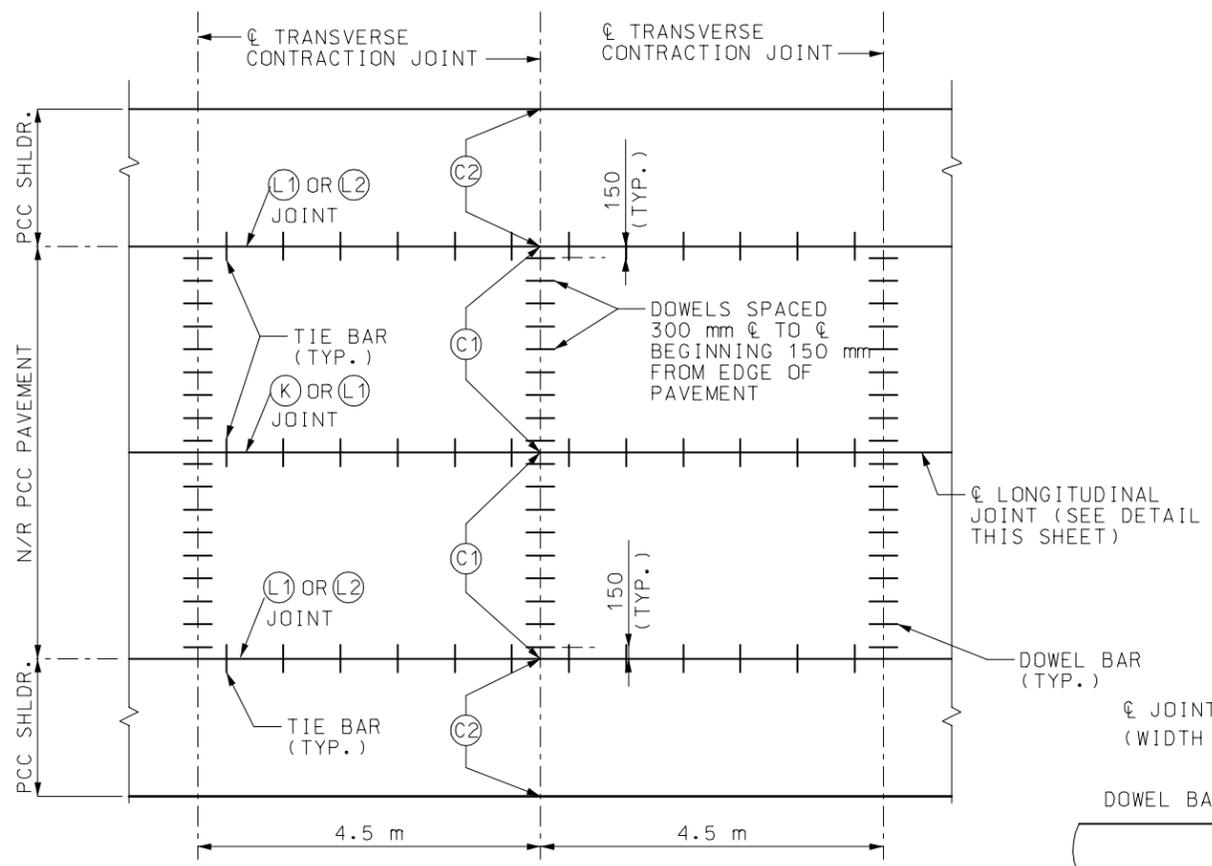
**DETAIL B**  
(FROM SHEET 1 OF 4)



**DETAIL A**  
(FROM SHEET 1 OF 4)

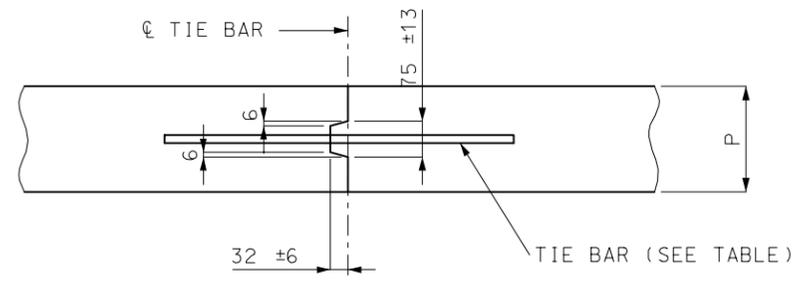
GENERAL NOTES:  
ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
<b>CONCRETE PAVEMENT AND BASE APPURTENANCES FOR 4.5 m JOINT SPACING</b>			
DATE: _____	EFFECTIVE: 08-01-2004	<b>M SPECIAL SHEET</b>	2 4



**JOINT PLAN AND SPACING FOR CONTRACTION JOINTS (1)**

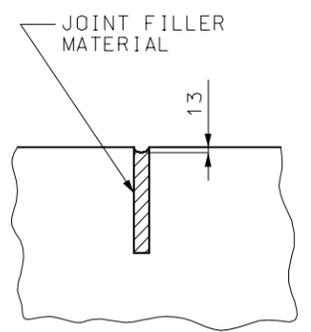
(1) JOINT NOT REQUIRED AT INSIDE SHOULDER ON DIVIDED HIGHWAYS OR AT INSIDE SHOULDER OF RAMPS.



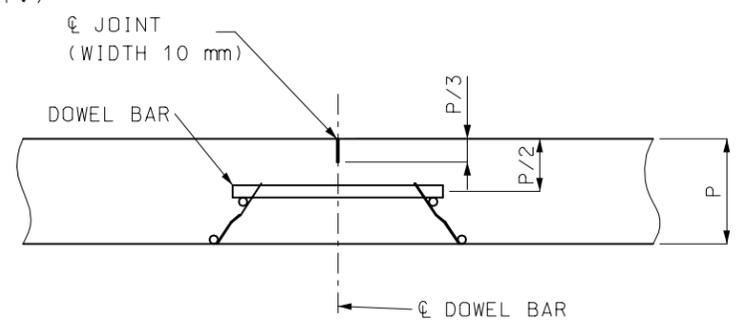
IF METAL IS USED TO FORM KEY DISCONTINUE STRIP FOR DISTANCE OF APPROXIMATELY 75 mm EACH SIDE OF TRANSVERSE JOINT.

- TYPE (K) REQUIRES TIE BAR.
- TYPE (M) CONSTRUCTED WITHOUT TIE BARS.
- (K) AND (M) JOINTS SHALL NOT BE SAWED.

**TONGUE AND GROOVE JOINTS (K) AND (M)**

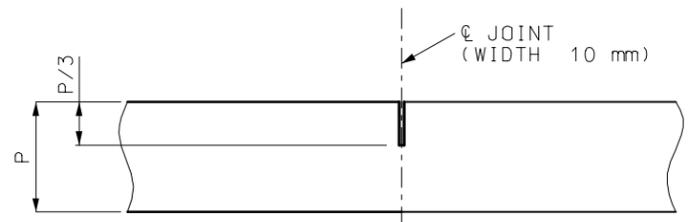


**JOINT FILLER DETAIL**



DOWELS REQUIRED. FOR PERMISSIBLE TYPES OF DOWELS SUPPORTING UNITS, SEE OTHER DRAWINGS.

TRANSVERSE CONTRACTION JOINTS FOR CONCRETE PAVEMENT OR BASE WIDENING SHALL MATCH EXISTING JOINTS.



**TRANSVERSE CONTRACTION JOINT (C2)**

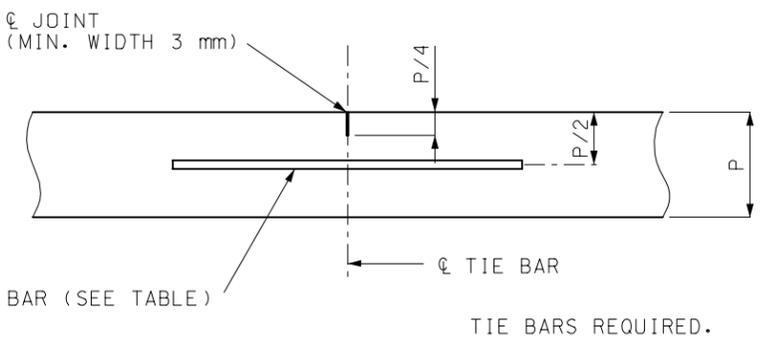
**TRANSVERSE CONTRACTION JOINT (C1) (2)**

(2) DOWEL BARS ARE REQUIRED FOR ALL PAVEMENTS HAVING THE SAME THICKNESS AS THE TRAVELED WAY.

GENERAL NOTES:

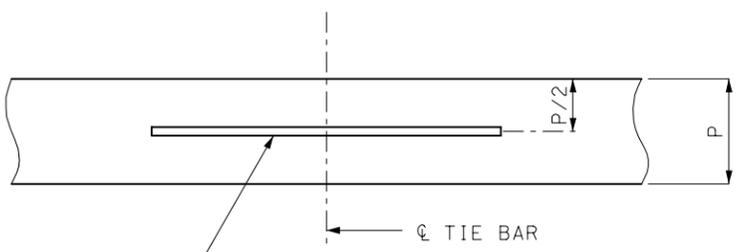
ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

THE FINAL POSITION OF ALL DOWELS AND TIE BARS SHALL BE PERPENDICULAR TO THE PLANE OF THE JOINT AND PARALLEL TO THE SURFACE OF THE PAVEMENT AND PARALLEL TO EACH OTHER.



**LONGITUDINAL JOINT (L1)**

TIE BARS REQUIRED.



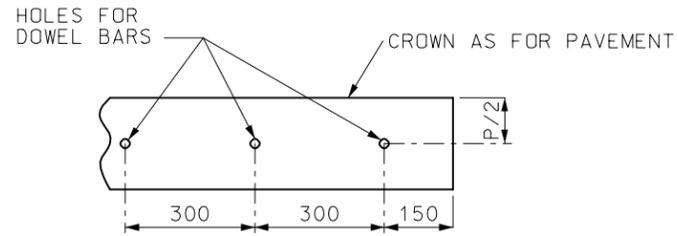
TIE BAR (SEE TABLE)

TIE BARS REQUIRED.

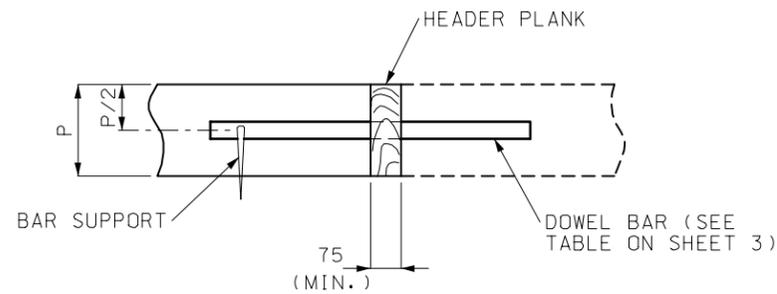
**LONGITUDINAL CONSTRUCTION JOINT FOR NEW CONSTRUCTION (L2)**

TIE BAR TABLE				
PCCP THICKNESS (P)	DOWEL SIZE (mm)	TIE BAR SIZE (mm)	DOWEL SPACING	TIE BAR SPACING
≤ 250 mm	32 x 450	16M x 750	300 mm CTRS.	750 mm CTRS.
> 250 mm	38 x 450	19M x 1000	300 mm CTRS.	750 mm CTRS.

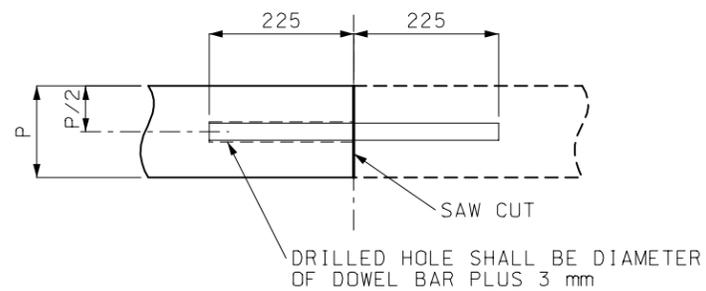
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
<b>CONCRETE PAVEMENT AND BASE APPURTENANCES FOR 4.5 m JOINT SPACING</b>			
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			<b>4</b>



PART ELEVATION OF  
HEADER PLANK



HEADER SECTION



SAWED SECTION

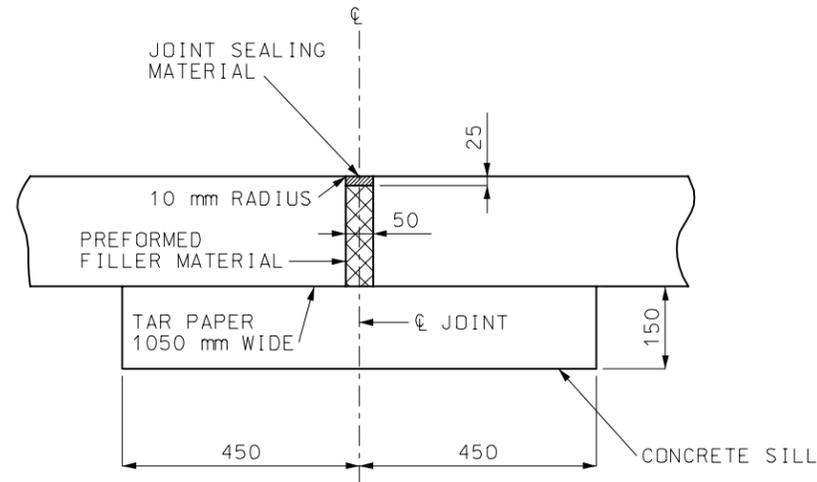
THE HEADER BOARD SHALL BE SUFFICIENTLY RIGID TO PREVENT DISTORTION FROM THE TYPICAL SECTION AND MAINTAIN A STRAIGHT LINE FROM PAVEMENT EDGE TO PAVEMENT EDGE.

THE CONSTRUCTION JOINT MAY BE SAWED FULL DEPTH, HOLES FOR DOWEL BARS SHALL BE DRILLED AFTER THE CONCRETE HAS SUFFICIENT SET TO PREVENT DAMAGE. DOWEL BARS SHALL BE BONDED INTO THE HOLES.

BONDING FOR DOWEL BARS SHALL BE EPOXY OR POLYESTER BONDING AGENTS AS SPECIFIED IN SECTION 1039.

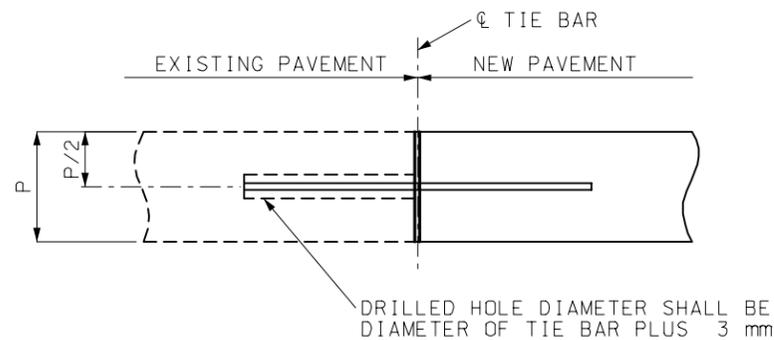
THE PORTION OF THE DOWEL OUTSIDE THE HOLE SHALL BE COATED WITH AN APPROVED LUBRICANT.

**CONSTRUCTION JOINT (C)**



SILL SHALL EXTEND 450 mm BEYOND EACH EDGE OF THE PAVEMENT AND SHALL BE CONSTRUCTED OF CONCRETE REGARDLESS OF ADJACENT BASE MATERIAL.

**EXPANSION JOINTS (E)**



TIE BARS SHALL BE EPOXY COATED, DEFORMED REINFORCING BARS MEETING THE REQUIREMENTS OF SECTIONS 710 AND 1057.

BONDING FOR TIE BARS SHALL BE EPOXY OR POLYESTER BONDING AGENTS AS SPECIFIED IN SECTION 1039.

TIE BAR SIZE AND LENGTH SHALL BE BASED ON THE THICKNESS OF THE THINNER PAVEMENT OR SHOULDER TO BE TIED TOGETHER.

**LONGITUDINAL CONSTRUCTION JOINT (EXISTING PAVEMENT)**

GENERAL NOTES:

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
<b>CONCRETE PAVEMENT AND BASE APPURTENANCES FOR 4.5 m JOINT SPACING</b>			
DATE: _____	EFFECTIVE: 08-01-2004	<b>M SPECIAL SHEET</b>	4 4